



SEQUENCE LISTING

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<120> Vascular Endothelial Growth Factor-X

<130> 51935/004

<140> US/09/869,198

<141> 2001-06-21

<150> GB 9828377.3

<151> 1998-12-22

<150> US 60/124,967

<151> 1999-03-18

<150> US 60/164,131

<151> 1999-11-08

<160> 97

<170> PatentIn Ver. 2.0

<210> 1

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<212> PRT

<213> Homo sapiens

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Glu Ser Asn Leu Ser Ser Lys Phe Gln Phe Ser Ser Asn Lys Glu Gln
1 5 10 15

Tyr Gly Val Gln Asp Pro Gln His Glu Arg Ile Ile Thr Val Ser Thr
20 25 30

Asn Gly Ser Ile His Ser Pro Arg Phe Pro His Thr Tyr Pro Arg Asn
35 40 45

Thr Val Leu Val Trp Arg Leu Val Ala Val Glu Glu Asn Val Trp Ile
50 55 60

Gln Leu Thr Phe Asp Glu Arg Phe Gly Leu Glu Asp Pro Glu Asp Asp
65 70 75 80

Ile Cys Lys Tyr Asp Phe Val Glu Val Glu Pro Ser Asp Gly Thr
85 90 95

Ile Leu Gly Arg Trp Cys Gly Ser Gly Thr Val Pro Gly Lys Gln Ile
100 105 110

Ser Lys Gly Asn Gln Ile Arg Ile Arg Phe Val Ser Asp Glu Tyr Phe
115 120 125

Pro Ser Glu Pro Gly Phe Cys Ile His Tyr Asn Ile Val Met Pro Gln
130 135 140

Phe Thr Glu Ala Val Ser Pro Ser Val Leu Pro Pro Ser Ala Leu Pro
145 150 155 160

Leu Asp Leu Leu Asn Asn Ala Ile Thr Ala Phe Ser Thr Leu Glu Asp
165 170 175

Leu Ile Arg Tyr Leu Glu Pro Glu Arg Trp Gln Leu Asp Leu Glu Asp
180 185 190

Leu Tyr Arg Pro Thr Trp Gln Leu Leu Gly Lys Ala Phe Val Phe Gly
195 200 205

Arg Lys Ser Arg Val Val Asp Leu Asn Leu Leu Thr Glu Glu Val Arg
210 215 220

Leu Tyr Ser Cys Thr Pro Arg Asn Phe Ser Val Ser Ile Arg Glu Glu
225 230 235 240

Leu Lys Arg Thr Asp Thr Ile Phe Trp Pro Gly Cys Leu Leu Val Lys
245 250 255

Arg Cys Gly Gly Asn Cys Ala Cys Cys Leu His Asn Cys Asn Glu Cys
260 265 270

Gln Cys Val Pro Ser Lys Val Thr Lys Lys Tyr His Glu Val Leu Gln
275 280 285

Leu Arg Pro Lys Thr Gly Val Arg Gly Leu His Lys Ser Leu Thr Asp
290 295 300

Val Ala Leu Glu His His Glu Glu Cys Asp Cys Val Cys Arg Gly Ser
305 310 315 320

Thr Gly Gly

<210> 2
<211> 345
<212> PRT
<213> Homo sapiens

<400> 2
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Arg Gln Gly Thr Gln Ala Glu Ser Asn Leu Ser Ser Lys Phe Gln Phe
20 25 30

Ser Ser Asn Lys Glu Gln Tyr Gly Val Gln Asp Pro Gln His Glu Arg
35 40 45

Ile Ile Thr Val Ser Thr Asn Gly Ser Ile His Ser Pro Arg Phe Pro
 50 55 60
 His Thr Tyr Pro Arg Asn Thr Val Leu Val Trp Arg Leu Val Ala Val
 65 70 75 80
 Glu Glu Asn Val Trp Ile Gln Leu Thr Phe Asp Glu Arg Phe Gly Leu
 85 90 95
 Glu Asp Pro Glu Asp Asp Ile Cys Lys Tyr Asp Phe Val Glu Val Glu
 100 105 110
 Glu Pro Ser Asp Gly Thr Ile Leu Gly Arg Trp Cys Gly Ser Gly Thr
 115 120 125
 Val Pro Gly Lys Gln Ile Ser Lys Gly Asn Gln Ile Arg Ile Arg Phe
 130 135 140
 Val Ser Asp Glu Tyr Phe Pro Ser Glu Pro Gly Phe Cys Ile His Tyr
 145 150 155 160
 Asn Ile Val Met Pro Gln Phe Thr Glu Ala Val Ser Pro Ser Val Leu
 165 170 175
 Pro Pro Ser Ala Leu Pro Leu Asp Leu Leu Asn Asn Ala Ile Thr Ala
 180 185 190
 Phe Ser Thr Leu Glu Asp Leu Ile Arg Tyr Leu Glu Pro Glu Arg Trp
 195 200 205
 Gln Leu Asp Leu Glu Asp Leu Tyr Arg Pro Thr Trp Gln Leu Leu Gly
 210 215 220
 Lys Ala Phe Val Phe Gly Arg Lys Ser Arg Val Val Asp Leu Asn Leu
 225 230 235 240
 Leu Thr Glu Glu Val Arg Leu Tyr Ser Cys Thr Pro Arg Asn Phe Ser
 245 250 255
 Val Ser Ile Arg Glu Glu Leu Lys Arg Thr Asp Thr Ile Phe Trp Pro
 260 265 270
 Gly Cys Leu Leu Val Lys Arg Cys Gly Gly Asn Cys Ala Cys Cys Leu
 275 280 285
 His Asn Cys Asn Glu Cys Gln Cys Val Pro Ser Lys Val Thr Lys Lys
 290 295 300
 Tyr His Glu Val Leu Gln Leu Arg Pro Lys Thr Gly Val Arg Gly Leu
 305 310 315 320
 His Lys Ser Leu Thr Asp Val Ala Leu Glu His His Glu Glu Cys Asp
 325 330 335
 Cys Val Cys Arg Gly Ser Thr Gly Gly
 340 345

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<210> 3
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caggcggaat ccaacctgag tagtaaattc cagtttcca gcaacaagga acagaacgga 120
gtacaagatc ctcagcatga gagaattatt actgtgtcta ctaatggaag tattcacagc 180
ccaaggtttc ctcataactta tccaagaaat acggtcttgg tatggagatt agtagcagta 240
gagaaaaatg tatggataca acttacgttt gatgaaagat ttgggcttga agacccagaa 300
gatgacatat gcaagtatga tttttagaa gttgaggaac ccagtgtatgg aactatatta 360
ggcgctggt gtggcttgg tactgtacca ggaaaacaga tttctaaagg aaatcaaatt 420
aggataagat ttgtatctga tgaatatttt cttctgaac cagggttctg catccactac 480
aacattgtca tgccacaatt cacagaagct gtgagtctt cagtgttacc cccttcagct 540
ttgccactgg acctgcttaa taatgctata actgcctta gtaccttgg agaccttatt 600
cgatatctt aaccagagag atgcagttg gacttagaag atctatata tag gccaacttgg 660
caacctctt gcaaggcttt tggggggaa agaaaatcca gagtgggttga tctgaacatt 720
ctaacagagg aggttaagatt atacagctgc acacctcgta acttctcagt gtccataagg 780
gaagaactaa agagaaccga taccatttc tggccagggtt gtctcctgg taaacgctgt 840
ggtgggaact gtgcctgtt tctccacaat tgcaatgaat gtcaatgtgt cccaaagcaaa 900
gttactaaaa aataaccacga ggtccttcag ttgagaccaa agaccgggtt caggggattt 960
cacaatcac tcaccgacgt ggccttggag caccatgagg agtgtgactg tgtgtgcaga 1020
gggagcacag gagga                                         1035

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<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer

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aaaatgtatg gatacaactt ac                                         22

<210> 5
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer

<400> 5
gtttgatgaa agatttgggc ttg                                         23

<210> 6
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer

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<400> 6
tttctaaagg aaatcaaatt ag 22

<210> 7
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer

<400> 7
gataagattt gatatctgatg 20

<210> 8
<211> 17
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer

<400> 8
gatgtctcct ctttcag 17

<210> 9
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer

<400> 9
gcacaactcc taattctg 18

<210> 10
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer

<400> 10
agcacacctat tccgttg 18

<210> 11
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer

<400> 11
tagtacatag aatgttctgg 20

<210> 12
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer

<400> 12
aagagacata cttctgtac 19

<210> 13
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer

<400> 13
ccaggtacaa taagtgaact g 21

<210> 14
<211> 28
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer

<400> 14
cctttagaaa tctgtttcc tggcacag 28

<210> 15
<211> 31
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer

<400> 15
ggaaaaatatt catcagatac aaatcttatac c 31

<210> 16
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer

<400> 16
ggtccagtgaa caaagctgaa gg 22

<210> 17

<211> 29
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<400> 17
ctgggttcaag atatcgaata aggtcttcc 29

<210> 18
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<400> 18
tttggggaaa cttggggaaa ctgg 24

<210> 19
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<400> 19
gtccaggttt tgctttgatc c 21

<210> 20
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<400> 20
aattggatcc gagagtgggt gatctgaacc 30

<210> 21
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<400> 21
aattggatcc ggaaagaaaa tccagagtgg 30

<210> 22
<211> 40
<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:primer

<400> 22

ggttgaattc attatttttt agtaactttg cttgggacac

40

<210> 23

<211> 31

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:primer

<400> 23

aattgaattc attatcctcc tgtgctccct c

31

<210> 24

<211> 60

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 24

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<210> 25

<211> 34

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 25

aattgaattc gctatcctcc tgtgctccct ctgc

34

<210> 26

<211> 111

<212> PRT

<213> Homo sapiens

<400> 26

Gly Val Gln Asp Pro Gln His Glu Arg Ile Ile Thr Val Ser Thr Asn
1 5 10 15

Gly Ser Ile His Ser Pro Arg Phe Pro His Thr Tyr Pro Arg Asn Thr
20 25 30

Val Leu Val Trp Arg Leu Val Ala Val Glu Glu Asn Val Trp Ile Gln
35 40 45

Leu Thr Phe Asp Glu Arg Phe Gly Leu Glu Asp Pro Glu Asp Asp Ile

50

55

60

Cys Lys Tyr Asp Phe Val Glu Val Glu Pro Ser Asp Gly Thr Ile
65 70 75 80

Leu Gly Arg Trp Cys Gly Ser Gly Thr Val Pro Gly Lys Gln Ile Ser
85 90 95

Lys Gly Asn Gln Ile Arg Ile Arg Phe Val Ser Asp Glu Tyr Phe
100 105 110

<210> 27

<211> 168

<212> PRT

<213> Homo sapiens

<400> 27

Met Ala Met Asp Ile Gly Ile Asn Ser Asp Pro Glu Ser His His His
1 5 10 15

His His His Glu Ser Asn Leu Ser Ser Lys Phe Gln Phe Ser Ser Asn
20 25 30

Lys Glu Gln Asn Gly Val Gln Asp Pro Gln His Glu Arg Ile Ile Thr
35 40 45

Val Ser Thr Asn Gly Ser Ile His Ser Pro Arg Phe Pro His Thr Tyr
50 55 60

Pro Arg Asn Thr Val Leu Val Trp Arg Leu Val Ala Val Glu Glu Asn
65 70 75 80

Val Trp Ile Gln Leu Thr Phe Asp Glu Arg Phe Gly Leu Glu Asp Pro
85 90 95

Glu Asp Asp Ile Cys Lys Tyr Asp Phe Val Glu Val Glu Pro Ser
100 105 110

Asp Gly Thr Ile Leu Gly Arg Trp Cys Gly Ser Gly Thr Val Pro Gly
115 120 125

Lys Gln Ile Ser Lys Gly Asn Gln Ile Arg Ile Arg Phe Val Ser Asp
130 135 140

Glu Tyr Phe Pro Ser Glu Pro Gly Phe Cys Ile His Tyr Asn Ile Val
145 150 155 160

Met Pro Gln Phe Thr Glu Ala Val
165

<210> 28

<211> 504

<212> DNA

<213> Homo sapiens

<400> 28
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cctcagcatg agagaattat tactgtgtct actaatggaa gtattcacag cccaaggttt 180
cctcatactt atccaagaaa tacggcttg gtatggagat tagtagcagt agagggaaaat 240
gtatggatac aacttacgat tgatgaaaga tttgggcttg aagacccaga agatgacata 300
tgcaagtatg atttgtaga agttgagaa cccagtgtatg gaactatatt agggcgctgg 360
tgtggttctg gtactgtacc agggaaaacag atttctaaag gaaatcaaata taggataaga 420
tttgtatctg atgaatattt tccttctgaa ccagggttct gcatccacta caacattgtc 480
atgccacaat tcacagaagc tgtg 504

<210> 29
<211> 132
<212> PRT
<213> Homo sapiens

<400> 29
Asp Leu Tyr Arg Pro Thr Trp Gln Leu Leu Gly Lys Ala Phe Val Phe
1 5 10 15
Gly Arg Lys Ser Arg Val Val Asp Leu Asn Leu Leu Thr Glu Glu Val
20 25 30
Arg Leu Tyr Ser Cys Thr Pro Arg Asn Phe Ser Val Ser Ile Arg Glu
35 40 45
Glu Leu Lys Arg Thr Asp Thr Ile Phe Trp Pro Gly Cys Leu Leu Val
50 55 60
Lys Arg Cys Gly Gly Asn Cys Ala Cys Cys Leu His Asn Cys Asn Glu
65 70 75 80
Cys Gln Cys Val Pro Ser Lys Val Thr Lys Lys Tyr His Glu Val Leu
85 90 95
Gln Leu Arg Pro Lys Thr Gly Val Arg Gly Leu His Lys Ser Leu Thr
100 105 110
Asp Val Ala Leu Glu His His Glu Glu Cys Asp Cys Val Cys Arg Gly
115 120 125
Ser Thr Gly Gly
130

<210> 30
<211> 300
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

<220>
<221> n = a, t, g or c
<222> (41)

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<220>
<221> n = a, t, g or c
<222> (293)

<400> 30
cacaatcac tcaccgacgt ggccctggag caccatgagg ngtgtactg tgtgtgcaga 60
gggagcacag gaggatagcc gcatcaccac cagcagctct tgcccagagc tgtgcagtgc 120
agtggctgat tctatttagag aacgtatgcg ttatctccat ccttaatctc agttgttgc 180
ttcaaggacc tttcatctc aggattaca gtgcattctg aaagaggaga catcaaacag 240
aattaggagt tgtgcaacag ctctttgag aggaggctaa aggacaggag aanaggtctt 300

<210> 31
<211> 284
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Human EST

<400> 31
tgcagtgcag tggctgattc tattagagaa cgtatgcgtt atctccatcc ttaatctcag 60
ttgttgctt caaggaccc tcacatccag gatttacagt gcattctgaa agaggagaca 120
tcaaacagaa ttaggagttg tcaacacgt ctttgagag gaggcctaaa ggacaggaga 180
aaaggtctc aatcgtggaa agaaaattaa atgttgtatt aaatagatca ccagctagtt 240
tcagagttac catgtacgta ttccactagc tgggttctgt attt 284

<210> 32
<211> 275
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

<400> 32
cacgaggtcc ttcagtttag accaaagacc ggtgtcaggg gattgcacaa atcactcacc 60
gacgtggccc tggagcacca tgaggagtgt gactgtgtgt gcagagggag cacagggga 120
tagccgcac accaccagca gctttgccc agagctgtgc agtgcagtgg ctgattctat 180
tagagaacgt atgcgttatac tccatccttatac atctcagttt tttgcttcaa ggaccttca 240
tcttcaggat ttacagtgca ttctgaaaga ggaga 275

<210> 33
<211> 278
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

<220>
<221> n = a, t, g or c
<222> (248)

<400> 33
ggaggatagc cgcatcacca ccagcagctc ttgcccagag ctgtgcagtgc cagtggctga 60
ttctatttaga gaacgtatgc gttatctcca tccttaatctc cagttgttgc cttcaaggac 120

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ctttcatctt caggatttac agtgcattct gaagaggag acatcaaaca gaattaggag 180
tttgcaaca gcttttga gaggaggct aaaggacagg agaaaaggc 240
gaaagaanat taaatgtgt attaaataga caccagct 278

<210> 34
<211> 275
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

<400> 34
ggaggatagc cgcatcacca ccagcagctc ttgccagag ctgtgcagtg cagtggctga 60
ttctattaga gaacgtatgc gttatctcca tccttaatct cagttgttg cttcaaggac 120
ctttcatctt caggatttac atgcattctg aaagaggaga catcaaacag aattaggagt 180
tgtcaacag ctctttgag aggaggccta aaggacagga gaaaaggctc tcaatcgtgg 240
aaagaaaatt aaatgttgc taaaatagat cacca 275

<210> 35
<211> 261
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

<400> 35
gagaaccgat accattttct ggccaggtt tctcctggtt aaacgctgtg gtgggaactg 60
tgcctgttgc ctccacaatt gcaatgaatg tcaatgtgtc ccaagcaaag ttactaaaaa 120
ataccacgag gtccttcagt tgagacaaa gaccgggtgc aggggattgc acaaatcact 180
caccgacgtg gccctggagc accatgagga gtgtgactgt gtgtgcagag ggagcacagg 240
aggatagccg catcaccacc a 261

<210> 36
<211> 279
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

<400> 36
agaaaatcca gagtggttga tctgaacctt ctaacagagg aggttaagatt atacagctgc 60
acacctcgta acttctcagt gtccataagg gaagaactaa agagaaccga taccattttc 120
tggccaggtt gtctcctgggt taaacgctgt ggtgggaact gtgcctgttgc tctccacaat 180
tgcaatgaat gtcaatgtgt cccaaagcaaa gttactaaaa aataccacga ggtccttcag 240
ttgagaccaa agaccgggtt caggggatttgc cacaatca 279

<210> 37
<211> 262
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

<400> 37
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 cagaggaggt aagattatac agtgcacac ctcgtaactt ctcagtgcc ataaggaaag 120
 aactaaagag aaccgatacc atttctggc caggttgtct cctggtaaa cgctgtggtg 180
 ggaactgtgc ctgttgtc tcacaattgc aatgaatgtc aatgtgtccc aagcaaagtt 240
 actaaaaaat accacgaggt cc 262

<210> 38
 <211> 289
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Human EST

<220>
 <221> n = a, t, g or c
 <222> (35)

<220>
 <221> n = a, t, g or c
 <222> (51)

<220>
 <221> n = a, t, g or c
 <222> (125)

<400> 38
 atttcatctt caggatttac agtgcattct gaaanaggag aaatcaaaca naattaggag 60
 ttgtgcaaca gctctttga gaggaggcct aaaggacagg agaaaaaggtc ttcaatcg 120
 gaaanaaaat taaatgttgtt attaaataga tcaccagcta gtttcagagt taccatgtac 180
 gtattccact agctgggttc tgtatccag ttcttcgat acggcttagg gtaatgtcag 240
 tacaggaaaa aaactgtgca agtgagcacc tgattccgtt gccttgctt 289

<210> 39
 <211> 245
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Human EST

<400> 39
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 attgcacaaa tcactcaccg acgtggccct ggagcaccat gaggagtgtg actgtgtgtg 120
 cagaggggac acaggaggat agccgcatca ccaccagcag ctcttgccca gagctgtgca 180
 gtgcagtggc tgattctatt agagaacgta tgcgttatct ccatccttaa tctcagttgt 240
 ttgtct 245

<210> 40
 <211> 247
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Human EST

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<220>
<221> n = a, t, g or c
<222> (2)

<220>
<221> n = a, t, g or c
<222> (86)

<220>
<221> n = a, t, g or c
<222> (191)

<400> 40
angagttgcc cagagctgtg cagtgcagtg gctgattcta ttagagaacg tatgcgttat 60
ctccatcctt aatctcagtt gtttgnntca aggacctttc atcttcagga tttacagtgc 120
attctgaaag aggagacatc aaacagaatt aggagttgtg caacagctct tttgagagga 180
ggcctaaagg ncaggagaaa aggtctcaa tcgtggaaag aaaattaaat gttgtattaa 240
atagatc 247

<210> 41
<211> 232
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

<400> 41
agggaaatcaa attaggataa gatttgtatc tgatgaatat tttccttctg aaccttctaa 60
cagaggaggt aagattatac agctgcacac ctcgtaactt ctcagtgtcc ataagggaag 120
aactaaagag aaccgatacc atttctggc caggttgtct cctggtaaa cgctgtggtg 180
ggaactgtgc ctgttgtctc cacaattgca atgaatgtca atgtgtccca ag 232

<210> 42
<211> 253
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

<400> 42
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aggaggccta aaggacagga gaaaaggctt tcaatcgtgg aaagaaaatt aaatgttgta 120
ttaaatagat caccagctag tttcagatc accatgtacg tattccacta gctgggtct 180
gtatccagt tcttcgata cggcttaggg taatgtcagt acaggaaaaa aactgtgcaa 240
gtgagcacct gat 253

<210> 43
<211> 265
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

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<220>
<221> n = a, t, g or c
<222> (238)

<220>
<221> n = a, t, g or c
<222> (246)..(247)

<220>
<221> n = a, t, g or c
<222> (252)

<220>
<221> n = a, t, g or c
<222> (257)

<400> 43
tgcaacagct ctttgagag gaggcctaaa ggacaggaga aaaggcttc aatcgaa 60
agaaaattaa atgttattt aaatagatca ccagctagtt tcagagttac catgtacgta 120
ttccactagc tgggtctgt atttcagttc tttcgatacg gcttagggta atgtcagttac 180
aggaaaaaaa ctgtgcaagt gaggcacctga ttccgttgcc ttgccttaacc ctaaagcncc 240
atgtcnnggg cnaaaancga aaaat 265

<210> 44
<211> 291
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

<220>
<221> n = a, t, g or c
<222> (61)

<220>
<221> n = a, t, g or c
<222> (66)

<220>
<221> n = a, t, g or c
<222> (88)

<220>
<221> n = a, t, g or c
<222> (141)

<220>
<221> n = a, t, g or c
<222> (155)

<220>
<221> n = a, t, g or c
<222> (172)

<220>
<221> n = a, t, g or c

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<222> (177)

<220>

<221> n = a, t, g or c
<222> (227)

<220>

<221> n = a, t, g or c
<222> (229)

<220>

<221> n = a, t, g or c
<222> (274)

<400> 44

ccttaatctc agttgttgc ttcaaggacc tttcatcttc aggatttaca gtgcattctg 60
naagangaga catcaaacag aattaggnctgtgcaaaag ctcttttagg aggaggccta 120
aaggacagga gaaaaggctctcaatcgtgg aaagnaaatt aaatgttgta tnaaatngat 180
caccagctag tttcagatgtt accatgtacg tattccacta gctgggnncng tattcagtct 240
ttcggAACGG cttagggtaa tgtcagtaca ggaaaaaac tgtcagtga g 291

<210> 45

<211> 279
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Human EST

<220>

<221> n = a, t, g or c
<222> (205)

<220>

<221> n = a, t, g or c
<222> (240)

<220>

<221> n = a, t, g or c
<222> (254)

<400> 45

ataaaaataga tcaccagcta gtttcagagt taccatgtac gtattccact agctgggttc 60
tgtatttcag ttctttcgat acggcttagg gtaatgtcag tacaggaaaaaa aaactgtgca 120
agtgagcacc tgattccgtt gccttggctt aactctaaag ctccatgtcc tgggcctaaa 180
atcgatataaa atctggattt ttttntttt ttttgcgcattt attcacatata gtaaaccagn 240
acattctatg tacnacaaaac ctgggtttta aaaaggaac 279

<210> 46

<211> 181
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Human EST

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<400> 46
ggctagttc agagttacca tgtacgtatt ccactagctg ggttctgtat ttcagttctt 60
tcgatacggc ttaggtaat gtcagtcacag gaaaaaaaaact gtgcaagtga gcacctgatt 120
ccgtgcctt gcttaactct aaagctccat gtcctgggcc taaaatcgta taaaatctgg 180
a
181

<210> 47
<211> 184
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

<220>
<221> n = a, t, g or c
<222> (54)

<400> 47
aatagatcac cagctagttt cagagttacc atgtacgtat tccactagct gggntctgta 60
tttcagttcc tttcgatacg gcttagggta atgtcagtcac agggaaaaaaag ctgtgcaagt 120
gagcacctga ttccgttgcc ttgcttaact ctaaagctcc atgtcctggg cctaaaatcg 180
tata
184

<210> 48
<211> 290
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

<400> 48
aaaggaacta tggctatg aattaaactt gtgtcggtct gataggacag actggatttt 60
tcatatttct tattaaattt tctgccattt agaagaagag aactacattt atggtttgg 120
agagataaaac ctgaaaagaa gagtggcctt atcttcactt tatcgataag tcagtttatt 180
tgtttcattt tgtacatttt tatattctcc ttttgacatt ataactgttg gctttctaa 240
tcttgtaaa tatatctatt tttaccaaag gtatctaata ttcttttta 290

<210> 49
<211> 300
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

<220>
<221> n = a, t, g or c
<222> (41)

<220>
<221> n = a, t, g or c
<222> (293)

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<400> 49
cacaaatcac tcaccgacgt gcccctggag caccatgagg ngtgtactg tgtgtgcaga 60
gggagcacag gaggatagcc gcatcaccac cagcagctct tgcccagagc tgtcagtgc 120
agtggctgat tctatttagag aacgtatgcg ttatctccat ccttaatctc agttgttgc 180
ttcaaggacc tttcatcttc aggatttaca gtgcattctg aaagaggaga catcaaacag 240
aattaggagt tgtgcaacag ctctttgag aggaggctaa aggacaggag aanaggtctt 300

<210> 50
<211> 284
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

<400> 50
tgcagtgcag tggctgattc tattagagaa cgtatgcgtt atctccatcc ttaatctcag 60
ttgtttgctt caaggacctt tcacatccat gatttacagt gcattctgaa agaggagaca 120
tcaaacagaa ttaggagttg tgcaacagct ctggagag gaggcctaaa ggacaggaga 180
aaaggtcttc aatcgtggaa agaaaaattaa atgttgcatt aaatagatca ccagctagtt 240
tcagagttac catgtacgta ttccactagc tgggttctgt attt 284

<210> 51
<211> 301
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

<220>
<221> n = a, t, g or c
<222> (47)

<220>
<221> n = a, t, g or c
<222> (253)

<400> 51
cttgttaaat atatctattt ttaccaaagg tatttaatat tcctttantta tgacaactta 60
gatcaactat ttttagcttg gtaaaatttt ctaaacacaa ttgttatagc cagaggaaca 120
aagatgatat aaaatattgt tgctctgaca aaaatacatg tatttcattc tcgtatggtg 180
ctagagttag attaatctgc attttaaaaa actgaattgg aatagaattg gtaagttgca 240
aagacttttt ganaataatt aaattatcat atcttccatt cctgttattt ggggagaaaa 300
t 301

<210> 52
<211> 275
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

<400> 52
cacgaggtcc ttcagttgag accaaagacc ggtgtcaggg gattgcacaa atcactcacc 60
gacgtggccc tggagcacca tgaggagtgt gactgtgtgt gcagaggag cacaggggga 120

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tagccgcac accaccagca gctttgccc agagctgtgc agtgcagtgg ctgattctat 180
tagagaacgt atgcgttatac tccatcctta atctcagttt tttgcttcaa ggaccttca 240
tcttcaggat ttacagtgca ttctgaaaga ggaga 275

<210> 53
<211> 288
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

<400> 53
ttaaaaagga actatgttgc tatgaattaa acttgtgtca tgctgatagg acagactgga 60
tttttcatat ttcttattaa aatttctgcc atttagaaga agagaactac attcatggtt 120
tggaagagat aaacctgaaa agaagagtgg ccttatcttc actttatcga taagttagtt 180
tatttgttcc attgtgtaca ttttatatt ctcctttga cattataact gttggcttca 240
taatctgtta aatatatcta ttttaccaa aggtattaa tattcttt 288

<210> 54
<211> 278
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

<220>
<221> n = a, t, g or c
<222> (248)

<400> 54
ggaggatagc cgcatcacca ccagcagctc ttgcccagag ctgtgcagtgc cagtggctga 60
ttcttattaga gaacgtatgc gttatctcca tccttaatct cagttgtttt cttcaaggac 120
ctttcatctt caggatttac agtgcattct gaaagaggag acatcaaaca gaattaggag 180
ttgtgcaaca gctctttga gaggaggcct aaaggacagg agaaaaggc ttcataatcg 240
gaaagaanat taaatgttgc attaaataga caccagct 278

<210> 55
<211> 275
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

<400> 55
ggaggatagc cgcatcacca ccagcagctc ttgcccagag ctgtgcagtgc cagtggctga 60
ttcttattaga gaacgtatgc gttatctcca tccttaatct cagttgtttt cttcaaggac 120
ctttcatctt caggatttac atgcattctg aaagaggaga catcaaaca aattaggag 180
tgtgcaacag ctctttgag aggaggccta aaggacaggaa gaaaaggctc tcaatcg 240
aaagaaaatt aaatgttgc taaatagat cacca 275

<210> 56
<211> 261
<212> DNA
<213> Artificial Sequence

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<220>
<223> Description of Artificial Sequence: Human EST

<400> 56
gagaaccgat accattttct ggccaggttg ttcctgggtt aaacgctgtg gtgggaactg 60
tgcctgtgt ctccacaatt gcaatgaatg tcaatgtgtc ccaagcaaa ttactaaaaa 120
ataccacgag gtccttcagt tgagacaaa gaccgggtgc aggggattgc acaaatcact 180
caccgacgtg gccctggagc accatgagga gtgtgactgt gtgtgcagag ggagcacagg 240
aggatagccg catcaccacc a 261

<210> 57
<211> 279
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

<400> 57
agaaaatcca gagtggtgga tctgaacctt ctaacagagg aggttaagatt atacagctgc 60
acacctcgta acttctcagt gtccataagg gaagaactaa agagaaccga taccatttc 120
tggccaggtt gtctcctggt taaacgctgt ggtggaaact gtgcctgtt tctccacaat 180
tgcaatgaat gtcaatgtgt cccaaagcaaa gttactaaaa aataccacga ggtccttcag 240
ttgagaccaa agaccgggtgt caggggattt cacaatca 279

<210> 58
<211> 259
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

<400> 58
agatgatata aaatattgtt gctctgacaa aaatacatgt atttcattct cgtatggtgc 60
tagagttaga ttaatctgca tttaaaaaa ctgaatttggaa atagaattgg taagttgcaa 120
agacttttg aaaataatta aattatcata tcttccattc ctgttattgg agataaaaat 180
aaaaagcaac ttatgaaagt agacattcag atccagccat tactaaccta ttccttttt 240
ggggaaatct gagccttagc 259

<210> 59
<211> 284
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

<400> 59
ttttaaaaaa ggaactatgt tgctatgaat taaaacttggt tcgtgctgat aggacagact 60
ggatTTTca tatttcttat taaaatttct gccattttaga agaagagaac tacattcatg 120
gttttggaa gataaacctg aaaagaagag tggcctatct tcactttatc gataagttag 180
tttatttggtt tcattgtgtt cattttata ttctcccttg acatataact gttgggtttt 240
ctaattctgtt aaatataatct attttacca aaggtattta atat 284

<210> 60

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<211> 262
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

<400> 60
aggaaatcaa attaggataa gatttgtatc tgatgaatat ttcccttctg aaccttctaa 60
cagaggaggt aagattatac agctgcacac ctcgtaactt ctcagtgtcc ataagggaaag 120
aactaaagag aaccgatacc attttctggc caggttgtct cctggttaaa cgctgtggtg 180
ggaactgtgc ctgttgtctc ccacaattgc aatgaatgtc aatgtgtccc aagcaaagtt 240
actaaaaaat accacgaggt cc 262

<210> 61
<211> 289
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

<220>
<221> n = a, t, g or c
<222> (45)

<220>
<221> n = a, t, g or c
<222> (51)

<220>
<221> n = a, t, g or c
<222> (125)

<400> 61
atttcatctt caggatttac' agtgcattct gaaanaggag aaatcaaaca naattaggag 60
tttgtcaaca gctctttga gaggaggcct aaaggacagg agaaaaggtc ttcaatcg 120
gaaanaaaat taaatgtgt attaaataga tcaccagcta gttcagagt taccatgtac 180
gtattccact agctgggttc tgtatccag ttcttcgat acggcttagg gtaatgtcag 240
tacaggaaaa aaactgtgca agtgagcacc tgattccggtt gccttgctt 289

<210> 62
<211> 251
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

<220>
<221> n = a, t, g or c
<222> (10)

<220>
<221> n = a, t, g or c
<222> (246)

<400> 62
ttagcttggn aaattttct aaacacaatt gttatagcca gaggaacaaa gatgatataa 60
aatattgttgc tctgcacaaa aatacatgta tttcattctc gtatgggtc agagtttagat 120
taatctgcat tttaaaaaac tgaattggaa tagaattgggt aagttgcaaa gacttttga 180
aaataattaa attatcatat cttccattcc tggttattgga gatgaaaata aaaagcaact 240
tatganagta g 251

<210> 63
<211> 252
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

<220>
<221> n = a, t, g or c
<222> (250)

<400> 63
ctttttatg acaacttaga tcaactatgg ttagcttggt aaattttct aaacacaatt 60
gttatacgca gaggaacaaa gatgatataa aatattgttgc tctgcacaaa aatacatgta 120
tttcattctc gtatgggtc agagtttagat taatctgcat tttaaaaaac tgaattggaa 180
tagaattgggt aagttgcaaa ggcttttga aaataattaa attatcatat cttccattcc 240
tggttattggn gg 252

<210> 64
<211> 245
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

<400> 64
caaagttact aaaaaatacc acgaggcct tcagttgaga ccaaagaccg gtgtcagggg 60
attgcacaaa tcactcaccg acgtggccct ggagcaccat gaggagtgtc actgtgtgtc 120
cagagggagc acaggaggat agccgcatca ccaccagcag ctcttgcctt gagctgtc 180
gtgcagtggc tgattctatt agagaacgta tgcgttatct ccattctaa tctcagttgt 240
ttgtct 245

<210> 65
<211> 245
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

<400> 65
agataaaacct gaaaagaaga gtggccttat cttcacttta tcgataagtc agtttatttg 60
tttcattgtc tacatttttta tattctcattt ttgacattat aactgttggc ttttctaattc 120
ttgttaaaaata tatctatttt taccaaaggat attaatattt ctttttatg acaacttaga 180
tcaactatgg ttagcttggt aaattttct aaacacaatt gttatagcca gaggaacaaa 240
qatqa 245

<210> 66
<211> 243
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

<400> 66
ctggattttt catatttctt attaaaattt ctgccattta gaagaagaga actacattca 60
tggtttggaa gagataaacc tggaaagaag agtggcctta tcttcacttt atcgataagt 120
cagtttattt gttcattgt gtacattttt atattctcct tttgacatta taactgttgg 180
cttttctaat cttgttaaat atatctattt ttaccaaagg tatttaatat tctttttat 240
gac 243

<210> 67
<211> 244
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

<220>
<221> n = a, t, g or c
<222> (64)

<220>
<221> n = a, t, g or c
<222> (215)

<400> 67
gctcatattc acatatgtaa accagaacat tctatgtact acaaacctgg tttttaaaaa 60
gganctatgt tgctatgaat taaaacttgtg tcgtgctgat aggacagact ggattttca 120
tatttcttat taaaatttct gccatttaga agaagagaac tacattcatg gtttggaga 180
gataaacctg aaaagaagag tggcatttac ttcantttat cgataagtca gtttatttgc 240
ttca 244

<210> 68
<211> 247
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

<220>
<221> n = a, t, g or c
<222> (2)

<220>
<221> n = a, t, g or c
<222> (86)

<220>
<221> n = a, t, g or c

<222> (190)

<400> 68

angagttgcc cagagctgtg cagtgcagtg gctgattcta ttagagaacg tatgcgttat 60
ctccatcctt aatctcagtt gttgnntca aggaccttc atcttcaggaa tttacagtgc 120
attctgaaag aggagacatc aaacagaatt aggagttgtg caacagctct tttgagagga 180
ggcctaaagg ncaggagaaa aggtctcaa tcgtggaaag aaaattaaat gttgtattaa 240
atagatc 247

<210> 69

<211> 233

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Human EST

<400> 69

aaagatgata taaaatattt ttgctctgac aaaaatacat gtatttcatt ctcgtatgg 60
gctagagtta gattaatctg cattttaaaa aactgaattt gaatagaattt ggtaagttgc 120
aaagactttt tgaaaataat taaattatca tatcttccat tcctgttattt ggagatgaaa 180
ataaaaagca acttatgaaa gtagacattc agatccagcc attactaacc tat 233

<210> 70

<211> 232

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Human EST

<400> 70

aggaaaatcaa attaggataa gatttgtatc tcatgaaatat tttccttctg aaccttctaa 60
cagaggaggt aagattatac agctgcacac ctcgtaactt ctcagtgtcc ataaggaaag 120
aactaaagag aaccgataacc attttctggc caggttgtct cttggtaaa cgctgtgg 180
ggaactgtgc ctgttgtctc cacaattgca atgaatgtca atgtgtccca ag 232

<210> 71

<211> 253

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Human EST

<400> 71

gtgcattctg aaagaggaga catcaaacag aattaggagt tttgcaacag ctctttgag 60
aggaggccta aaggacagga gaaaaggctt tcaatcgatgg aaagaaaattt aaatgttgc 120
ttaaatagat caccagctt tttcagatc accatgtacg tattccacta gctgggtct 180
gtatattcagt tcttcgata cggcttaggg taatgtcagt acaggaaaaa aactgtgcaa 240
gtgagcacct gat 253

<210> 72

<211> 233

<212> DNA

<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

<220>
<221> n = a, t, g or c
<222> (48)

<400> 72
tgtacatttt tatattctcc ttttgacatt ataactgttg gctttcnaa tcttgtaaa 60
tatatctatt tttaccaaag gtatthaata ttctttta tgacaactta gatcaactat 120
tttagcttg gtaaattttt ctaaacacaa ttgttatagc cagaggaaca aagatgatat 180
aaaatattgt tgctctgaca aaaatacatg tatttcattc tcgtatggtg cta 233

<210> 73
<211> 250
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

<220>
<221> n = a, t, g or c
<222> (53)

<400> 73
cacaattgtt atagccagag gaacaaagat gatataaaat attgttgctc tgncaaaaat 60
acatgtattt cattctcgta tggtgctaga gttagattaa tctgcatttt aaaaaactga 120
attggaatag aattggtaag ttgcaaagac ttttgaaaaa taattaaattt atcatatctt 180
ccattcctgt tattggagat gaaaataaaa agcaacttat gaaaagtaaat tcagatccac 240
cattactaac 250

<210> 74
<211> 247
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

<400> 74
atttcattct cgtatggtgc tagagttaga ttaatctgca ttttaaaaaa ctgaattgga 60
atagaattgg taagttgcaa agacttttg aaaataatta aattatcata tcttccattc 120
ctgttattgg agatgaaaat aaaaagcaac ttatgaaagt agacattcaag atccagccat 180
tactaaccta ttcccttttt gggaaatct gaggctagct cagaaaaaca taaagcaccct 240
tgaaaaaa 247

<210> 75
<211> 265
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

<220>
<221> n = a, t, g or c

<222> (238)

<220>

<221> n = a, t, g or c
<222> (246)..(247)

<220>

<221> n = a, t, g or c
<222> (252)

<220>

<221> n = a, t, g or c
<222> (257)

<400> 75

tgcaacagct ctttgagag gaggcctaaa ggacaggaga aaaggtcttc aatcgtaaa 60
agaaaattaa atgttgtatt aaatagatca ccagcttagtt tcagagttac catgtacgta 120
ttccactagc tgggttctgt atttcagttc tttcgatacg gcttagggta atgtcagttac 180
aggaaaaaaa ctgtgcaagt gaggcacctga ttccgttgcc ttgccttaacc ctaaagcncc 240
atgtcnnggg cnaaaancga aaaat 265

<210> 76

<211> 251

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Human EST

<220>

<221> n = a, t, g or c
<222> (134)

<220>

<221> n = a, t, g or c
<222> (157)

<400> 76

tttctaaaca caattgttat agccagagga acaaagatga tataaaatat tggtgctctg 60
acaaaaatac atgtatttca ttctcgatgt gtgcttaggt tagattaatc tgcattttaa 120
aaaactgaat tggnatagaa ttggtaagtt gcaaagnctt tttgaaaata attaaattat 180
catatcttcc attcctgtta ttggaggatg gaaaataaaaa agcaacttat ggaaagttagg 240
acattcagat c 251

<210> 77

<211> 291

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Human EST

<220>

<221> n = a, t, g or c
<222> (61)

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<220>
<221> n = a, t, g or c
<222> (66)

<220>
<221> n = a, t, g or c
<222> (88)

<220>
<221> n = a, t, g or c
<222> (141)

<220>
<221> n = a, t, g or c
<222> (155)

<220>
<221> n = a, t, g or c
<222> (172)

<220>
<221> n = a, t, g or c
<222> (177)

<220>
<221> n = a, t, g or c
<222> (227)

<220>
<221> n = a, t, g or c
<222> (229)

<220>
<221> n = a, t, g or c
<222> (284)

<400> 77
ccttaatctc agttgttgc ttcaaggacc tttcatcttc aggatttaca gtgcattctg 60
naagangaga catcaaacag aattaggngt tgtcaaaag ctctttgag aggaggccta 120
aaggacagga gaaaaggctc ncaatcgtgg aaagnaaatt aaatgttga tnaaatngat 180
caccagctag ttccagagtt accatgtacg tattccacta gctgggnncng tattcagtct 240
ttcggAACGG cttagggtaa tgtcagtaca ggaaaaaac tgtgcagtga g 291

<210> 78
<211> 253
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

<220>
<221> n = a, t, g or c
<222> (84)

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<220>
<221> n = a, t, g or c
<222> (143)

<400> 78
gtactacaaa cctgggtttt aaaaaggaac tatgttgcta tgaattaaac ttgtgtccat 60
gctgatagga cagactggat tttncatatt tcttattaaa atttctgcc a 120
gagaactaca ttcatggttt ggnagagata aacctgaaaa gaagagtggc cttatcttca 180
ctttatcgat aagtcagttt atttgtttca tgtgtacatt tttatattct cctttgacat 240
ataacgtggc ttt 253

<210> 79
<211> 204
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

<220>
<221> n = a, t, g or c
<222> (190)

<400> 79
ttatattctc ctttgacat tataactgtt ggctttcta atcttgtttaa atatatctat 60
tttaccaaa ggtatttaat attctttttt atgacaactt agatcaacta ttttagctt 120
ggtaaatttt tctaaacaca attgttatacg ccagaggaac aaagatgata taaaatattg 180
ttgctctgan aaaaatacat gtat 204

<210> 80
<211> 303
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

<220>
<221> n = a, t, g or c
<222> (2)

<220>
<221> n = a, t, g or c
<222> (87)..(114)

<220>
<221> n = a, t, g or c
<222> (267)

<220>
<221> n = a, t, g or c
<222> (272)

<220>
<221> n = a, t, g or c

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<222> (300)

<400> 80
anactgtgca agtgaggcacc tgattccgtt gccttgctta actctaaagc tccatgtcct 60
gggcctaaaa tcgtataaaa tctggannnn nnnnnnnnnnn nnnngctcat attcacatat 120
gttaaaccaga acattctatg tactacaaac ctgggtttta aaaaggaact atgttgctat 180
gaattaaact tgtgtcgtgc tgataggaca gactggattt ttcatatttc ttattaaaat 240
ttctgccatt agaagaagag aactacnttc anggtttgga agagataacc ctgaaaagan 300
ggg 303

<210> 81
<211> 228
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

<220>
<221> n = a, t, g or c
<222> (112)

<400> 81
gctcatattc acatatgtaa accagaacat tctatgtact acaaaccctgg tttttaaaaa 60
ggaactattt gctatgaatt aaacttgtt cgtgctgata ggacagactg gntttttcat 120
atttcttatt anaatttctg ccattagaag aagagaacta cattcatggt ttggaagaga 180
taaacctgaa aagaagagtg gcctattca ctatcgat aagtcagt 228

<210> 82
<211> 193
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

<400> 82
gctcatattc acatatgtaa accagaacat tctatgtact acaaaccctgg tttttaaaaa 60
ggaactatgt tgctatgaat taaaacttgtt tcgtgctgat aggacagact ggattttca 120
tatttcttat taaaatttctt gccattttaga agaagagaac tacattcatg gtttggaaaga 180
gataaacctg aaa 193

<210> 83
<211> 282
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

<220>
<221> n = a, t, g or c
<222> (42)

<220>
<221> n = a, t, g or c

<222> (94)

<220>

<221> n = a, t, g or c
<222> (235)

<220>

<221> n = a, t, g or c
<222> (269)

<400> 83

aaaaaaactga attggaatag aattggtaag ttgcaaagac tnttgaaaa taattaaatt 60
atcatatatctt ccattcctgt tattggagat gaanataaaa agcaacttat gaaagtagac 120
attcagatcc agccattact aacctattcc tttttgggg aatctgagc ctagtcaga 180
aaaacataaaa gcacctgaa aaagacttgg cagcttcctg ataaagcgtg ctgtntgtca 240
gtaggaacac atcctattta ttgtgatgnt gtggtttatt at 282

<210> 84

<211> 279

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Human EST

<220>

<221> n = a, t, g or c
<222> (205)

<220>

<221> n = a, t, g or c
<222> (240)

<220>

<221> n = a, t, g or c
<222> (254)

<400> 84

ataaaataga tcaccagcta gtttcagagt taccatgtac gtattccact agctgggttc 60
tgtatttcag ttctttcgat acggcttagg gtaatgtcag tacaggaaaa aaactgtgca 120
agtgagcacc tgattccgtt gccttggctt aactctaaag ctccatgtcc tgggcctaaa 180
atcgatataaa atctggattt tttnttttt ttttgcgcattt attcacatata gtaaaccagn 240
acattctatg tacnacaaac ctggtttta aaaaggaac 279

<210> 85

<211> 181

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Human EST

<400> 85

ggctagtttc agagttacca tgtacgtatt ccactagctg gggtctgtat ttcagttctt 60
tcgatacggc ttagggtaat gtcaatgtcag gaaaaaaact gtcaatgtca gcacctgatt 120
ccgtgcctt gcttaactct aaagctccat gtcctggcc taaaatctgg 180

<210> 86
<211> 269
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

<400> 86
tggtaagttg caaagacttt ttgaaaataa ttaaattatc atatcttcca ttcctgttat 60
tggagatgaa aataaaaagc aacttatgaa agtagacatt cagatccagc cattactaac 120
ctattccttt tttggggaaa tctgagccta gctcagaaaa acataaaagca ccttgaaaaa 180
gacttggcag ctccctgata aagcgtgctg tgctgtgcag taggaaacac atcctattta 240
ttgtgatgtt gtggttata tcctaaacc 269

<210> 87
<211> 184
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

<220>
<221> n = a, t, g or c
<222> (54)

<400> 87
aatagatcac cagctagttt cagagttacc atgtacgtat tccactagct gggntctgta 60
tttcagttcc tttcgatacg gcttagggta atgtcagttac aggaaaaaaag ctgtgcaagt 120
gagcacctga ttccgttgcc ttgcttaact ctaaagctcc atgtcctggg cctaaaatcg 180
tata 184

<210> 88
<211> 164
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

<220>
<221> n = a, t, g or c
<222> (53)

<220>
<221> n = a, t, g or c
<222> (78)..(79)

<220>
<221> n = a, t, g or c
<222> (106)

<220>
<221> n = a, t, g or c

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<222> (119)

<220>
<221> n = a, t, g or c
<222> (121)

<400> 88
agataaacct gaaaagaaga gttgccttat nttaacttta tcgataagtc agnttattt 60
tttcattgtg tacatttnna tattctcctt ttgacattat aactgntggc ttttctaanc 120
ntgttaataa tatctatttt taccaaaggt atttaatatt ct 164

<210> 89
<211> 143
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

<400> 89
tatgtgtcta gagtttagatt aatctgcatt ttaaaaaact gaatttggaa agaatttggta 60
agtgc当地 aacttttggaa aataattaaa ttatcatatc ttccattcct gttatttggag 120
atgaaaataa aaagcaactt atg 143

<210> 90
<211> 164
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

<220>
<221> n = a, t, g or c
<222> (35)

<220>
<221> n = a, t, g or c
<222> (51)

<220>
<221> n = a, t, g or c
<222> (132)

<220>
<221> n = a, t, g or c
<222> (141)

<220>
<221> n = a, t, g or c
<222> (145)..(146)

<400> 90
ttttttttt tgctcatatt cacatatgt aaccngaaca ttctatgtac nacaaacctg 60
gtttttaaaa aggaactatg ttgctatgaa ttaaaacttgt gtcgtgctga taggacagac 120
tggattttcc anatttctt ntaannttc tgccatttag aaga 164

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<220>
<221> n = a, t, g or c
<222> (240)

<220>
<221> n = a, t, g or c
<222> (242)

<400> 92
gcaaagactt tttganaatn attaanttat catatcttcc attcctgtta tnggagatga 60
naataaaaag caacttatga aagtagacat tcagatccag ccattactaa cctattcctt 120
ttttgggaa atctgagcct agcncagaaa aacataaagc accttgaaaa agacttggca 180
gcttcctgat aaagcgtgct gtgctgtgca gtaggaacac atccnattt ttgtgntgtn 240
gnggttttat gatc 254

<210> 93
<211> 243
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

<220>
<221> n = a, t, g or c
<222> (103)..(120)

<400> 93
tgtcagtaca gaaaaaaaac tggcaagtg agcacctgat tccgttgcct tgcttaactc 60
taaagctcca tggcctggc ctaaaatcgt ataaaatctg gannnnnnnn nnnnnnnnnn 120
gctcatattc acatatgtaa accagaacat tctatgtact acaaacctgg tttttaaaaa 180
ggaactatgt tgctatgaat taaaacttgtg tcatgctgat aggacagact ggattttca 240
tat 243

<210> 94
<211> 244
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

<220>
<221> n = a, t, g or c
<222> (136)

<400> 94
aattatcata tcttccattc ctgttattgg agatgnaat aaaaagcaac ttatgaaagt 60
agacattcag atccagccat tactaaccta ttcctttt gggaaatct gagcctagct 120
cagaaaaaca taaagcacct tgaaaaagac tgtcagctc ctgataaagc gtgctgtgct 180
gtgcagtagg aacacatcct atttattgtg atgttggtt tttattatct taaactcggt 240
ccat 244

<210> 95
<211> 152

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<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Human EST

<220>
<221> n = a, t, g or c
<222> (2)

<220>
<221> n = a, t, g or c
<222> (16)

<220>
<221> n = a, t, g or c
<222> (33)

<220>
<221> n = a, t, g or c
<222> (34)

<220>
<221> n = a, t, g or c
<222> (82)

<220>
<221> n = a, t, g or c
<222> (97)

<220>
<221> n = a, t, g or c
<222> (108)

<220>
<221> n = a, t, g or c
<222> (125)

<220>
<221> n = a, t, g or c
<222> (127)

<220>
<221> n = a, t, g or c
<222> (137)

<400> 95
anagatgata taaaanattg ttgctctgac aannatacat gtatttcatt ctcgtatgg 60
gctagagttt gattaatctg cttttaaaaa aactganttg gaatagantt ggtaagttgc 120
aaagnncnttt gaaaatnattt aagttatcag at 152

<210> 96
<211> 292
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Human EST

<400> 96
ttccattcct gttattggag atgaaaataa aaagcaactt atgaaaagtag acattcagat 60
ccagccatta ctaacctatt cctttttgg gggaaatctga gcctagctca gaaaaacata 120
aagcacctt aaaaagactt ggcagcttcc tgataaaagcg tgctgtgctg tgcaatgg 180
acacatccta tttattgtga tggatgtggtt ttattatcta aactctgttc catacacttg 240
tataaaataca tggatatttt tatgtacaga agtatgttc ttaaccagg ca 292

<210> 97

<211> 308

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Human EST

<220>

<221> n = a, t, g or c

<222> (46)

<400> 97

cttccattcc ttttatttggatgaaaataaaaagcaactt tatganagta gacattcaga 60
tccagccatt actaacctat tcctttttgg gggaaatctg agcctagctc agaaaaaacat 120
aaagcacctt gaaaaagactt tgccagcttc ctgataaaagc gtgctgtgct gtgcagg 180
aacacatcctt atttattgtg atgttgggtt ttattatct taaactctgt tccatacact 240
tgtataaaata catggatattttttatgtaca gaagttatgttc tcttaaccagg ttcacttattt 300
gtacctgg 308